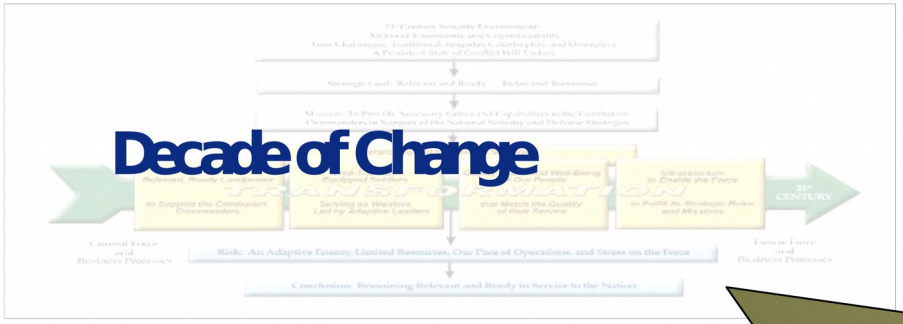
Assistant Secretary of the Army for Acquisition Logistics and Technology (ASA(ALT))

Innovations in Improving Weapon Systems through Continuous Process Improvement

15 April 2008
Ft. Belvoir VA

Mr. Mark Rocke
Deputy Assistant Secretary of the Army for Strategic Communications and Business Transformation (DASA ZG)



America's Army
A campaign-quality expeditionary force able to operate effectively with Joint, interagency and multinational partners across the spectrum of conflict.

Institutional Focus

Operational Focus

Transformational Focus

Enterprise Transformation

Business Transformation

Warfighting Transformation

GEN Casey

GEN Schoomaker

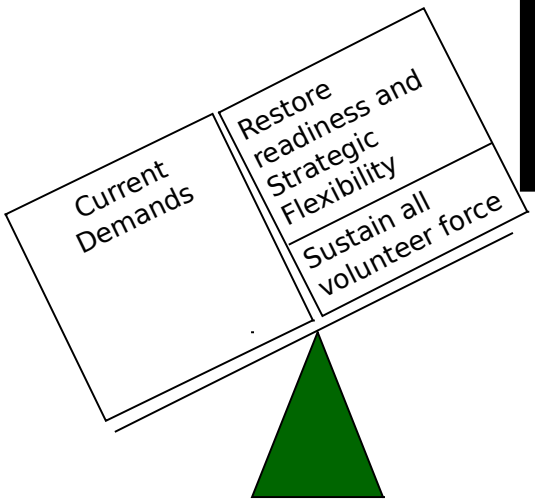
GEN Shinseki

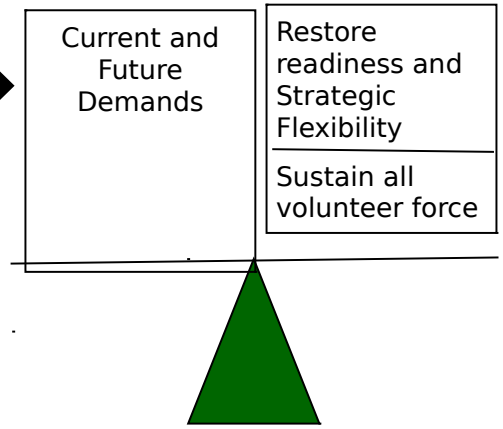
"We will not cement the transformational change of the Army until the institution reflects that change."

Chief of Staff, Army
19 June 2007

Our top priority over the next several years is to restore balance through four imperatives

Restore Balance



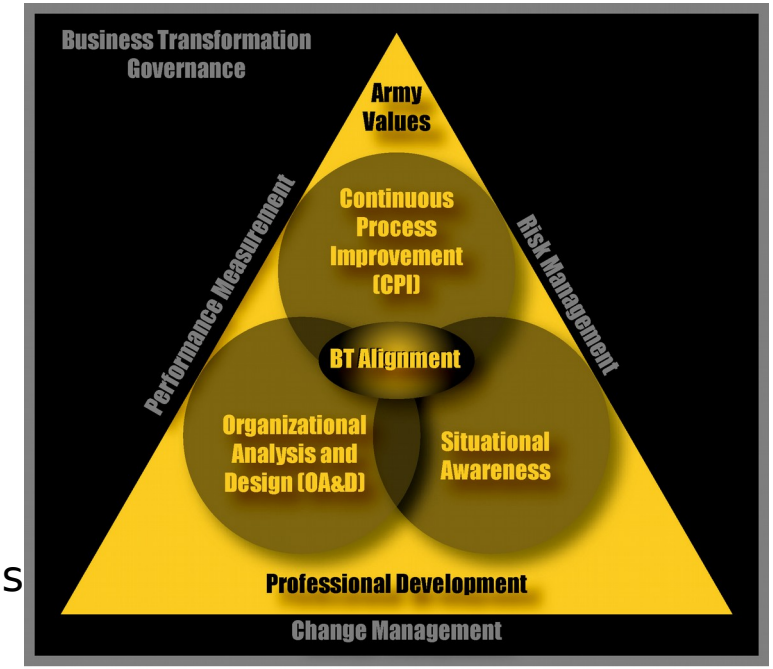


Army Imperatives

- We will **Sustain** our Soldiers, Families and Civilians;
- **Prepare** soldiers for success in current operations;
- **Reset** to restore readiness and depth for future operations; and
- **Transform** to become the Army the Nation needs today and in the future.

The Army approaches Business Transformation holistically through three areas of focus: Continuous Process Improvement, Organizational Analysis and Design, and Situational Awareness

- **Vision**
  - A fundamental change in how the Army does business
  - Apply proven business principals to the Army's business challenges
- **Desired Effects**
  - Maximize return on taxpayers' dollars
  - Culture of driving costs down vs driving budgets up
  - A culture of continuous improvement
- **Payoff**
  - An Army which effectively and efficiently provides the necessary forces and capabilities to the Combatant Commanders in support of National Security and Defense Strategies



The Army has identified major Enterprise processes where there are opportunities to significantly improve efficiencies

Army Enterprise Processes		
AROC/Requirements	Individual Training	Personnel Security Investigations
Army Working Capital Fund (AWCF)	Military Construction (MILCON)	Planning
Administering	Maintaining	Real Property Management
Capabilities Development	Medical/Dental Capabilities	Recruiting
Civilian HR	Military Personnel	Structure Manning Decision Review (SMDR)
Environmental	Military Recruiting	Servicing
Equipping	Mobilization/Demobilization	Supplying
Force Structure Doc	Organizing	Sustainment
IT Portfolio Mgmt	Planning, Programming, Budgeting, and Execution	Test &Evaluation
Unit Training		

The life-cycle management command initiative strategically and operationally aligns structure and processes to enable greater synergies to improve the effectiveness of all organizations involved

LCMCs Established by the 2004 MOA

LCMC	Aligned AMC MSCs and ASA(ALT) PEOs
Aviation/Missile LCMC ***(Now known as AMCOM LCMC)***	Aviation and Missile Command
	PEO Aviation
	PEO Missiles and Space
Communications/Electronics LCMC ***(Now known as CE-LCMC)***	Communications-Electronics Command
	PEO Command, Control, and Communications (Tactical)
	PEO Intelligence, Electronic Warfare and Sensors
Soldier/Ground Systems LCMC ***(Now known as TACOM LCMC)***	Tank and Automotive Command
	PEO Combat Support and Combat Service Support
	PEO Ground Combat Systems
	PEO Soldier
Joint Ammunition LCMC ***(Now known as Joint Munitions and Lethality LCMC)***	Joint Munitions Command
	PEO Ammunition

Lean Six Sigma as applied by the Acquisition Community to improve weapon systems…

- Lean Six Sigma works in both a manufacturing environment and a “white collar” transactional or service environment – providing quality products to the Soldier faster and cheaper

- The Acquisition Community has applied Lean Six Sigma to “manufacturing” projects, for example:
  - **Secure Mobile Anti-Jam Reliable Tactical Terminal (SMART-T) Reset**: focused on meeting Reset requirements for returning Southwest Asia (SWA) units with quick turn-around of quality equipment and implementation of an automated tracking system for increased visibility. The team projects a total cost avoidance of $539K.

- The Acquisition Community has also applied Lean Six Sigma to more transactional/service oriented projects, for example:
  - **Standardize Cost Analysis Requirements Description (CARD) and Reduce Cycle Time:** The former Army Acquisition Executive, Mr. Claude M. Bolton, identified the need for improvements to the CARD citing non-standard documentation processes as well as unwieldy cycle times as reasons for initiating the project. The recommendations proposed by the project team will be implemented with the Excalibur System. The expected results of this project include: A reduction in man hours from 4,300 to 3,000 (FY08) and Cost avoidance of $92,000 per new CARD completed.
  - **Apache:** Apache recently conducted a workshop that identified 25 service focused LSS projects that will help improve their effectiveness in providing Apache’s to the warfighter.

In 2007 the Army received numerous Shingo Prize Awards

Rock Island Arsenal – Joint Manufacturing & Technology Center

Gold

Forward Repair System (FRS)

Reduced Flow Time from 265 to 62 days
Reduced Work In Process from 32 to 13 units
Cost savings/avoidance of $4.8M

Tobyhanna Army Depot

Gold

AN/TPQ-36 Firefinder Antenna

✓Reduced Repair Cycle Time from 514 days to 429 days
✓Reduced Work In Process from 16 per month to 11 per month
✓Increased production from 1 to 15 systems

Red River Army Depot

Gold

HMMWV Recap

✓Increased production from 3 vehicles per month in 2004 to 32 vehicles per day since February 2006
✓Produced 65 additional vehicles at no additional cost in FY06
✓Cost avoidance of $3.89M

Letterkenny Army Depot

Silver

HMMWV Recap

✓Increased throughput to 17 vehicles per d
✓Reduced direct labor hours from 274 to 1
✓Produced 27 additional vehicles at no additional cost a $5.2M customer bene

Rock Island Arsenal – Joint Manufacturing & Technology Center

Silver

Shop Equipment Contact Maintenance (SECM)

✓Reduced flow time from 82 to 41 days
✓Reduced work in process from 40 to 15 units
✓Cost Savings/Avoidance of $4.9M

Anniston Army Depot

Silver

FAASV

✓ Increased total units produced from 52 to 88
✓ Decreased overtime hours per unit from 99.4 hrs to 59.52 hrs
✓ Decreased direct labor hours per unit from 341 hrs to 294 hrs

Red River Army Depot

Silver

Bradley Power-train

✓ Reduced man-hours from 56.5 to 32.5 per unit
✓ Increased output from 2 units to 6 units per day
✓ Reduced lead time from 7 days to 3 days per unit

Red River Army Depot

Silver

HEMTT

✓Productivity improved from 1530 hrs/vehic to 1011 hrs/vehicle
✓ Increased output from 2 vehicles/wk to 2 vehicles per day
✓ Decreased lead time from 120 days to 30 days

Aviation Center Logistics Command AMCOM – Fort Rucker

Bronze

TH-67 Creek C20J Engines

✓ Reduced cycle lead time from 294 to 213 hrs.
✓ Reduced shop backlog from 30 engines to 0
✓ Reduced engine faults from 105 to 72

Letterkenny Army D

Bronze

Power Generators

✓ Increased output from 118/mo to 500/mo
✓ Labor Savings since April 2006 is 83,349 man hours and $2.9M

Corpus Christi Army Depot

Bronze

H-60 Pavehawk

✓ Reduced Turn Around Time from 180 to 109 days
✓ Reduced average direct labor hrs by 3,324/aircraft
✓ Reduced the per unit loss from $490K to $133K

Anniston Army Depot

Bronze

M1 Abrams Turbine Engines

✓ Reduced assembly time from 364 to 232 min.
✓ Consistent 100% on-time delivery
✓ Cost savings of $18.4M

We encourage military leaders at all levels to learn new skills and contribute to the success of their organizations through LSS

- For more information, please visit www.army.mil/ArmyBTKC

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DUSA BT Portal (Behind AKO)
Welcome to the Army Business Transformation Knowledge Center
Army Business Transformation impacts every facet of the Army. Click on the Business Transformation Strategic Framework, at left, to see how the Army focuses its business transformation in the three areas of Continuous Process Improvement (CPI), Organizational Analysis and Design (OA&D), and Situational Awareness. Three additional enablers, Performance Measurement, Risk Management, and Change Management, help focus and align business transformation. Professional Development provides the staying power for successful business transformation, and a Transformation Governance process provides the direction for building, aligning and institutionalizing the business transformation efforts.
Michael A. Kirby
Deputy Under Secretary of the Army
BT Featured News
Introducing: EMDS! (February 08, 2008)
Designed to enable Situational Awareness, the Enterprise Management Decision Support (EMDS) system enhances the decision-making environment. EMDS will become the 'system of record' for senior leader decision support and for performance based implementation tracking.
Army Decision Making Made Easier Thanks to More Rapid, Effective Tools (January 3, 2008)
Army Business Transformation pursues aggressive strategies in developing stronger links between Warfighting Support and Operational Forces. eAWPS drives new
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